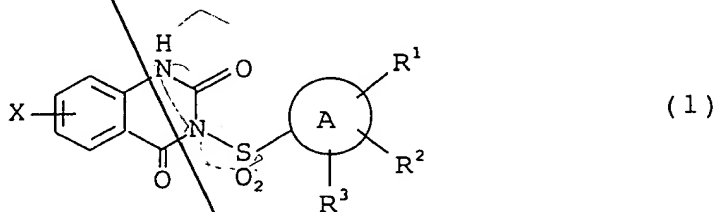


CLAIMS

1. (Amended) A quinazoline derivative having the following formula (1) and a pharmaceutically acceptable salt thereof:



wherein the ring A represents an aryl group;

R¹ represents a hydroxyl group, an amino group, a C₁ to C₄ lower alkylamino group which may be substituted with a carboxylic acid group, a C₁ to C₁₀ lower aralkylamino group which may be substituted with a carboxylic acid group, an amino group acylated with a C₁ to C₄ lower aliphatic acid which may be substituted with a carboxylic acid group, an amino group acylated with an aromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group acylated with a heteroaromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a C₁ to C₄ lower alkanesulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with an aromatic ring sulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a heteroaromatic ring sulfonic acid which may be substituted with a carboxylic acid group, a C₁ to C₄ lower alkyl group substituted with a carboxylic acid group, or a C₂ to C₄ lower alkylene group which may be substituted with a carboxylic acid group;

R² and R³ may be the same or different and represent a hydrogen atom, an unsubstituted or substituted C₁ to C₄ lower alkyl group, a halogen atom, a hydroxyl group, a C₁ to C₄ lower alkoxy group, an amino group, an unsubstituted or substituted C₁ to C₄ lower

Sub
C₃

09763213 041201

Sub C3

alkylamino group, an unsubstituted or substituted C₁ to C₁₀ aralkylamino group, an amino group acylated with a C₁ to C₄ lower aliphatic acid which may be substituted with a carboxylic acid group, an amino group acylated with an aromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group acylated with a heteroaromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a C₁ to C₄ lower alkanesulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with an aromatic ring sulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a heteroaromatic ring sulfonic acid which may be substituted with a carboxylic acid group, or a carboxylic acid group or

when the ring A is a benzene ring, R¹ and R² may form, together with the substituting benzene ring, a fused heterocyclic ring which may be substituted with a carboxylic acid and in which the carbon atom in the ring may form a carbonyl group and R³ is the same as defined above; and

X represents a hydrogen atom, a C₁ to C₄ lower alkyl group, a C₁ to C₄ lower alkoxy group, a halogen atom, a hydroxyl group, an amino group, or a nitro group, with the proviso that, when the ring A is a benzene ring, R¹ is an amino group and both R² and R³ are a hydrogen atom, R¹ is not positioned at the para-position to the sulfonyl group.

2. A quinazoline derivative or a pharmaceutically acceptable salt thereof as claimed in claim 1, wherein, in the formula (1), R¹ is a hydroxyl group, an amino group, a C₁ to C₄ lower alkylamino group substituted with a carboxylic acid group, or an amino group acylated with a C₁ to C₄ lower aliphatic acid substituted with a carboxylic acid group.

3. A quinazoline derivative or a pharmaceutically acceptable salt thereof as claimed in claim 1 or 2, wherein,

Sub B1

ART 34 AMDT

44

- 43/1 -

in the formula (1), R^2 is a carboxylic acid group or a hydrogen atom.

4. A quinazoline derivative or a pharmaceutically

Sub
B1

09763213-041201

Sub B1
A acceptable salt thereof as claimed in any one of ~~claims 1 to 3~~, wherein R³ in the formula (I) is a hydrogen atom. Claim 1

5. A pharmaceutical composition comprising as an effective ingredient a pharmaceutically effective amount of a quinazoline derivative or the pharmaceutically acceptable salt thereof according to any one of ~~claims 1 to 4~~ and a pharmaceutically acceptable carrier therefor. Claim 2

6. A chymase inhibitor having as an effective ingredient a quinazoline derivative or its pharmaceutically salt according to ~~any one of claims 1 to 4~~. Claim 3

7. A pharmaceutical composition as claimed in claim 5 for prevention or treatment of allergic diseases or rheumatic diseases.

8. A pharmaceutical composition as claimed in claim 5 for prevention or treatment of bronchial asthma, eczema, atopic dermatitis, mastocytosis, scleriosis, or rheumatoid arthritis.

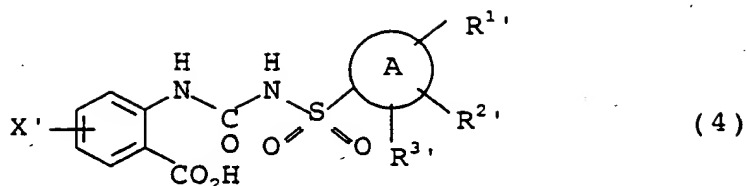
9. A pharmaceutical composition as claimed in claim 5 for prevention or treatment of cardiac and circulatory system diseases due to the abnormal exacerbation of Angiotensin II production.

10. A pharmaceutical composition as claimed in claim 5 for prevention or treatment of cardiac insufficiency, hypercardia, stasis cardiac diseases, hypertension, arteriosclerosis, peripheral circulatory diseases, revasoconstriction after PTCA, diabetic renal disorders or non-diabetic renal disorders, coronary diseases including cardiac infarction, angioendothelia, or vascular disorders accompanying arterialization and atheroma.

11. (Amended) A sulfonylurea derivative having the formula (4):

(X)

09763213-041201



wherein the ring A represents an aryl group;

10 $R^{1'}$ is R^1 , which may be protected with a protecting group, and which represents a hydroxyl group, an amino group, a C_1 to C_4 lower alkylamino group which may be substituted with a carboxylic acid group, a C_7 to C_{10} lower aralkylamino group which may be substituted
15 with a carboxylic acid group, an amino group acylated with a C_1 to C_4 lower aliphatic acid which may be substituted with a carboxylic acid group, an amino group acylated with an aromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino
20 group acylated with a heteroaromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a C_1 to C_4 lower alkanesulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with an aromatic ring sulfonic acid which may be substituted
25 with a carboxylic acid group, an amino group sulfonylated with a heteroaromatic ring sulfonic acid which may be substituted with a carboxylic acid group, a C_1 to C_4 lower alkyl group substituted with a carboxylic acid group, or a C_2 to C_4 lower alkylene group which may be
30 substituted with a carboxylic acid group;

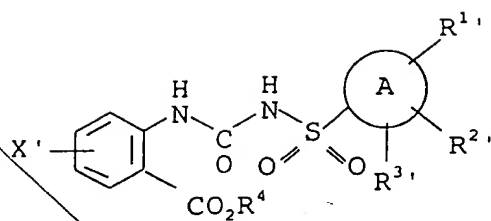
$R^{2'}$ and $R^{3'}$ are R^2 and R^3 , respectively, which may be protected with a protecting group, which may be the same or different, and which represent a hydrogen
35 atom, an unsubstituted or substituted C_1 to C_4 lower alkyl group, a halogen atom, a hydroxyl group, a C_1 to C_4 lower alkoxy group, an amino group, an unsubstituted or substituted C_1 to C_4 lower alkylamino group, an unsubstituted or substituted C_7 to C_{10} aralkylamino group,

an amino group acylated with a C₁ to C₄ lower aliphatic acid which may be substituted with a carboxylic acid group, an amino group acylated with an aromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group acylated with a heteroaromatic ring carboxylic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a C₁ to C₄ lower alkanesulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with an aromatic ring sulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a heteroaromatic ring sulfonic acid which may be substituted with a carboxylic acid group, or a carboxylic acid group or when the ring A is a benzene ring, R¹ and R² may form, together with the substituting benzene ring, a fused heterocyclic ring which may be substituted with a carboxylic acid and in which the carbon atom in the ring may form a carbonyl group and R³ is the same as defined above; and

X' is X, which may be protected with a protecting group and which represents a hydrogen atom, a C₁ to C₄ lower alkyl group, a C₁ to C₄ lower alkoxy group, a halogen atom, a hydroxyl group, an amino group, or a nitro group, with the proviso that, when the ring A is a benzene ring, R¹ is an amino group and both R² and R³ are a hydrogen atom, R¹ is not positioned at the para-position to the sulfonyl group.

12. (Amended) A sulfonylurea derivative having the formula (7):

00240 04201 00229260



(7)

wherein, the ring A represents an aryl group;

R¹ is R¹, which may be protected with a protecting group and which represents a hydroxyl group,

FOI40" ETE9260

an amino group, a C₁ to C₄ lower alkylamino group which
may be substituted with a carboxylic acid group, a C₇ to
C₁₀ lower aralkylamino group which may be substituted
with a carboxylic acid group, an amino group acylated
5 with a C₁ to C₄ lower aliphatic acid which may be
substituted with a carboxylic acid group, an amino group
acylated with an aromatic ring carboxylic acid which may
be substituted with a carboxylic acid group, an amino
group acylated with a heteroaromatic ring carboxylic acid
10 which may be substituted with a carboxylic acid group, an
amino group sulfonylated with a C₁ to C₄ lower
alkanesulfonic acid which may be substituted with a
carboxylic acid group, an amino group sulfonylated with
an aromatic ring sulfonic acid which may be substituted
15 with a carboxylic acid group, an amino group sulfonylated
with a heteroaromatic ring sulfonic acid which may be
substituted with a carboxylic acid group, a C₁ to C₄
lower alkyl group substituted with a carboxylic acid
group, or a C₂ to C₄ lower alkylene group which may be
20 substituted with a carboxylic acid group;

R^{2'} and R^{3'} are R² and R³, respectively,
which may be protected with a protecting group, which may
be the same or different and which represent a hydrogen
atom, an unsubstituted or substituted C₁ to C₄ lower
25 alkyl group, a halogen atom, a hydroxyl group, a C₁ to C₄
lower alkoxy group, an amino group, an unsubstituted or
substituted C₁ to C₄ lower alkylamino group, an
unsubstituted or substituted C₇ to C₁₀ lower aralkylamino
group, an amino group acylated with a C₁ to C₄ lower
30 aliphatic acid which may be substituted with a carboxylic
acid group, an amino group acylated with an aromatic ring
carboxylic acid which may be substituted with a
carboxylic acid group, an amino group acylated with a
heteroaromatic ring carboxylic acid which may be
35 substituted with a carboxylic acid group, an amino group
sulfonylated with a C₁ to C₄ lower alkanesulfonic acid
which may be substituted with a carboxylic acid group, an

amino group sulfonylated with an aromatic ring sulfonic acid which may be substituted with a carboxylic acid group, an amino group sulfonylated with a heteroaromatic ring sulfonic acid which may be substituted with a carboxylic acid group, or a carboxylic acid group or

when the ring A is a benzene ring, R^1 and R^2 may form together with the substituting benzene ring a fused heterocyclic ring which may be substituted with a carboxylic acid and in which the carbon atom in the ring may form a carbonyl group and R^3 is the same as defined above;

R^4 represents a protecting group for a carboxyl group; and

X' is X , which may be protected with a protecting group and which represents a hydrogen atom, a C_1 to C_4 lower alkyl group, a C_1 to C_4 lower alkoxy group, a halogen atom, a hydroxyl group, an amino group, or a nitro group, with the proviso that, when the ring A is a benzene ring, R^1 is an amino group and both R^2 and R^3 are a hydrogen atom, R^1 is not positioned at the para-position to the sulfonyl group.

13. A method for producing a quinazoline derivative having the formula (1) according to claim 1 comprising:

allowing a sulfonylurea derivative having the formula (4) according to claim 11 to a ring-closing reaction with a condensation agent or

deprotecting a carboxyl group of the sulfonylurea derivative having the formula (7) according to claim 12, followed by effecting a ring-closing reaction with a condensation agent.

09763213 041201

add
09

add
E1